



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09-938,150	08/22/2001	Yaw S. Obeng	SILO-0004	3370

27964 7590 07/03/2003

HITT GAINES P.C.  
P.O. BOX 832570  
RICHARDSON, TX 75083

EXAMINER

ALANKO, ANITA KAREN

ART UNIT	PAPER NUMBER
----------	--------------

1765

11

DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/938,150

Applicant(s)

OBENG ET AL.

Examiner

Anita K Alanko

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 4/23/03 election.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 28-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3,5,6,5 6) ☐ Other \_\_\_\_\_

***Election/Restrictions***

Applicant's election without traverse of Group III in Paper No. 10 is acknowledged.

***Claim Rejections - 35 USC § 112***

Claim 29-31, 39 and 43-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As to claim 31, the term "50% or more" renders the metes and bounds of the claim are unclear because it is unclear what the endpoint of the range is. As to claims 29-31 and 43-45, the claims are indefinite since they are directed to a packaged polishing pad, not a method of using the polishing pad. See MPEP 2173.05(p). As to claim 39, the claim fails to further limit the base claim since claim 37 (from which it depends) does not require that the additive comprise an abrasive.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 28-31, 33-37, 40-45 are rejected under 35 U.S.C. 102(a) as being anticipated by Bahten (US 6,076,662).

Bahten discloses a packaged polishing pad, comprising:

a sealable moisture tight package 423 (col.9, lines 36-67) having a dimension sufficient to contain a polishing pad ("porous polymeric device" 425); and

a polishing pad soaked in an aqueous medium (col.9, lines 13-35) and located within the sealable moisture tight package at ambient temperature and pressure.

As to claims 29-31, 43-45, intended use statements are given little patentable weight. The packaged polishing pad of Bahten is capable of being used by the method limitations cited.

As to claims 33-37, Bahten discloses that the aqueous medium comprises an additive, acidic, basic, or an oxidant (col.9, lines 13-35).

As to claims 40-42, Bahten discloses that the sealable moisture tight package comprises a flexible plastic material that is heat sealable or mechanically sealable 421 (col.9, lines 36-67).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 28-37, 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahten (US 6,076,662) in view of James (US 6,454,634 B1).

The discussion of Bahten from above is repeated here. As to claim 32, Bahten does not disclose the composition of the porous polymeric device. Bahten is directed, however, to CMP of wafers (see Background section, col.1, lines 21+). James teaches that a useful composition for porous polymeric devices for CMP of wafers is polyurethane (col.2, line 66). It would have

been obvious to one with ordinary skill in the art to use polyurethane as the porous polymeric device in the method of Bahten because James teaches that it is a useful composition for processing wafers.

Claims 28-31, 33-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bahten (US 6,076,662).

The discussion of Bahten from above is repeated here.

As to claims 38-39, Bahten does not disclose to soak the pad in ethanol amine or an abrasive. However, Bahten does disclose that the pad can be a "dirty" product (col.12, lines 12-14), for which it is obvious that a polishing pad would encompass polishing solution and abrasives since CMP conventionally uses abrasives during polishing. Examiner takes official notice that polishing slurries conventionally include ethanol amine and abrasives. It would have been obvious to one with ordinary skill in the art to polish with a slurry including ethanol amine and abrasives because they are conventional for polishing wafers. The resulting dirty polishing pad would then be packaged according to the method of Bahten, which inherently encompasses at least some degree of ethanol amine and abrasive remaining from the previous polishing steps.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art is cited to show soaking of polishing pads in solutions.

Paper No. 11  
Art Unit: 1765

---

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anita K Alanko whose telephone number is 703-305-7708. The examiner can normally be reached on Monday-Wednesday and Friday, 8:00 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin L Utech can be reached on 703-308-3836. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Anita K Alanko*

Anita K Alanko  
Primary Examiner  
Art Unit 1765

AKA  
June 29, 2003